# ORDINANCE NO. <u>935</u>

# AN ORDINANCE REPEALING AND REENACTING WITH AMENDMENTS CHAPTER 15.52 OF THE FIRESTONE MUNICIPAL CODE CONCERNING FLOODPLAIN REGULATION

WHEREAS, the Town of Firestone is a statutory town organized under and pursuant to the laws of the State of Colorado and has authority pursuant to state law, including Title 31, Article 23, and Title 29, Article 20, Colorado Revised Statutes, to adopt floodplain regulations; and

WHEREAS, Chapter 15.52 of the Firestone Municipal Code (FMC) sets limits on development in designated flood zones and describes procedures for approval of such development; and

WHEREAS, controlled development in designated flood zones is necessary to protect the safety of persons and property; and

WHEREAS, state and federal agencies issue regulations requiring certain elements be present in local floodplain development codes; and

WHEREAS, the Town's floodplain development code must be updated to meet the state and federal requirements; and

WHEREAS, the floodplain development regulations enacted by this ordinance meet state and federal requirements, and will improve safety for persons and property in the Town; and

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF FIRESTONE, COLORADO:

<u>Section 1</u>. Chapter 15.52 of the Firestone Municipal Code is hereby repealed and reenacted with amendments to read as follows:

#### **CHAPTER 15.52**

# Floodplain Regulations

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#### 15.52.010 Authorization.

The Legislature of the State of Colorado has in Title 31, Article 23 of the Colorado Revised Statutes, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. In addition, the Legislature of the State of Colorado has, in Title 29, Article 20 of the Colorado Revised Statutes, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood issues. Therefore, the town board ordains as set out in this chapter.

# 15.52.020 **Definitions**,

Unless specifically defined in this section, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

- 1. "100-YR Flood" means a flood having a recurrence interval that has a one percent (1%) chance of being equaled or exceeded during any given year.
- 2. "100-YR Floodplain" means the area of land susceptible to being inundated as the result of the occurrence of a 100-YR Flood.
- 3. "Appeal" means a request for review of the local administrator's interpretation of any provision of this chapter or a request for a variance.

- 4. "Area of shallow flooding" means a designated Zone AO or AH on the flood insurance rate map (FIRM).
- 5. "Area of special flood hazard" means the land in the floodplain subject to a one percent or greater chance of flooding in any given year as shown on the flood insurance rate map (FIRM).
- 6. "Base Flood Elevation (BFE)" means the elevation shown on the flood insurance rate map (FIRM) that indicates the calculated water surface elevation resulting from a 100-YR Flood.
  - 7. "Basement" means any area of a building having its floor below ground level on all sides.
- 8. "Channel" means the physical confine of stream or waterway consisting of a bed and stream banks, existing in a variety of geometries.
- 9. "Critical Facility" means a structure or related infrastructure, but not the land on which it is situated, as specified in Section 15.52.125, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood. See Section 15.52.125.
- 10. "Critical feature" means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.
- 11. "Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.
- 12. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:
  - a. The overflow of water from natural and manmade channels or reservoir spillways from storm water runoff:
    - b. The unusual and rapid accumulation or runoff of surface waters from any source; or
  - c. Mudslides or mudflows that occur from excess surface water that is combined with soil that is sufficiently fluid so as to flow over the surface of normally dry land areas.
- 13. "Flood insurance rate map" (FIRM) means the official map prepared by FEMA for the National Flood Insurance Program (NFIP) on which FEMA has been delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- 14. "Flood insurance study" means the official report provided in which FEMA has provided flood profiles, as well as the flood boundary floodway map and water surface elevation of the base flood.
- 15. "Floodproofed or Floodproofing" means any combination of structural or non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved property, water and sanitary facilities, and their contents.

- 16. "Letter of Map Revision (LOMR)" means an official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.
- 17. "Letter of Map Revision Based on Fill (LOMR-F)" means FEMA's modification of the Special Flood Hazard Area shown on the Flood Insurance Rate Map (FIRM) based on the placement of fill outside the existing regulatory floodway.
- 18. "Levee" means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.
- 19. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement) used for living purposes which includes working, storage, sleeping, cooking and eating, or recreation or any combination thereof. This includes any floor that could be converted to such a use such as a basement or crawl space. The lowest floor is a determinate for the flood insurance premium for a building, home or business. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood insurance Program regulations.
  - 20. "Manufactured home" means a single-family dwelling which:
    - a. Is partially or entirely manufactured in a factory;
    - b. Is not less than twenty-four feet in width and thirty-six feet in length;
    - c. Is installed on an engineered permanent foundation;
    - d. Has brick, wood or cosmetically equivalent exterior siding and a pitched roof; and
  - e. Is certified pursuant to the "National Manufactured Housing Construction and Safety Standards Act of 1974," 42 U.S.C. §5401 et seq., as amended, and such certification is confirmed prior to the issuance of a building permit.
- 21. "Mean sea level" means, for purpose of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.
- 22. "Mobile home" means a structure, transportable in one section, which is eight body feet or more in width and is thirty-two body feet or more in length, and which is built on a permanent chassis and designed to be used as a dwelling with or without permanent foundation, when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein, and bears the insignia of approval of the Division of Housing of Colorado and has not been altered since receiving such approval.
- 23. "New manufactured home park or manufactured subdivision" means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot (including, at a minimum, the installation of utilities, either final site grading

or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of the ordinance codified in this section.

- 24. "Regulatory Floodplain" means the 100-YR Floodplain, the area of land susceptible to being inundated as the result of the occurrence of a 100-YR Flood.
- 25. "Regulatory Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot (1') for FEMA regulated floodways that were defined before November 17, 2010, or without cumulatively increasing the water surface elevation more than six inches (6") for studies conducted after November 17, 2010. Letters of Map Revision (LOMR) or Letters of Map Revision Based on Fill (LOMR-F) for a floodway defined prior to November 17, 2010 shall not cumulatively increase the water surface elevation more than one foot (1').
- 26. "Remedy any violation" means to bring the structure or other development into compliance with state or local floodplain management regulations, or if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.
- 27. "Special Flood Hazard Area" shall mean the land identified on a FEMA FIRM subject to the 100-Year Floodplain and areas removed from the FEMA FIRM 100-YR Floodplain by a FEMA Letter of Map Revision Based on Fill (LOMR-F).
- 28. "Start of construction" includes substantial improvement and means the date the building permit was issued, provided that actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty days of the permit date. The actual start means the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
- 29. "Structure" means a walled and roofed building, a mobile home, a manufactured home, or a gas or liquid storage tank, that is principally above ground.
- 30. "Substantial improvement" means any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure either:
  - a. Before the improvement or repair is started; or
  - b. If the structure has been damaged and is being restored, before the damage occurred.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affected the external dimensions of this structure.

The term does not, however, include either:

- a. Any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions; or
- b. Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.
- 31. "Variance" means a grant of relief from the requirements of this chapter when specific enforcement would result in an unnecessary hardship. A variance, therefore, permits construction in a manner that would otherwise be prohibited by this chapter.
- 32. "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications or other evidence of compliance required in NFIP Standards Sections 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4) or (e)(5) is presumed to be in violation until such time as that documentation is provided.
- 33. "Watercourse" means an open channel, naturally occurring or manmade, which conveys stormwater runoff from a higher elevation to a lower elevation and discharges into a primary riverine system.
- 34. "Water surface elevation" means the height, in relation to the North American Vertical Datum (NAVD) of 1988, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

#### 15.52.030 Findings of fact.

- A. The special flood hazard areas of the town are subject to periodic inundation which can result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- B. These flood losses are caused by the cumulative effect of obstructions in special flood hazard areas which increase flood elevations and velocities, and when inadequately anchored, damage uses in other areas. Uses in special flood hazard areas that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

# 15.52.040 Provisions—Purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

A. To protect human life and health;

- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expenses of the general public;
  - D. To minimize prolonged business interruptions;
- E. To minimize damage to public and private facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
  - G. To ensure that potential buyers are notified that property is in an area of special flood hazards; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

# 15.52.050 Provisions--Generally.

In order to accomplish its purposes, this chapter includes methods and provisions for:

- A. Restricting or prohibiting uses which are dangerous to health, safety and property due to flood or erosion hazards, or which result in damaging increases in erosion or in flood elevations or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;
- D. Controlling filling, grading, dredging and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

# 15.52.060 Provisions--Greater restrictions to apply.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter and any other ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

# 15.52.070 Provisions--Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

A. Considered as minimum requirements;

- B. Liberally construed in favor of the town and in furtherance of the purposes of this chapter; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

# 15.52.080 Provisions--Applicability.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the town and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) within the town.

# 15.52.090 Special flood hazard areas--Basis for establishment.

The areas of special flood hazard within the corporate limits of the town are identified by the Federal Emergency Management Agency (FEMA) through the National Flood Insurance Program (NFIP) on Flood Insurance Rate Maps (FIRM) or Digital Flood Insurance Rate Maps (DFIRM).

#### 15.52.100 Flood hazard reduction--General standards.

In all areas of special flood hazards the following standards are required:

# A. Anchoring.

1. All new construction and substantial improvements to any structure shall be anchored to prevent flotation, collapse or lateral movement and to withstand hydrodynamic loads.

#### B. Construction Materials and Methods.

- 1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- 3. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

# C. Utilities.

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

- 2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.
- 3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- 4. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- D. Development Plans and Subdivision Proposals.
- 1. All final development plans and subdivision proposals shall be consistent with the need to minimize flood damage.
- 2. All final development plans and subdivision proposals shall have public and private utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- 3. All final development plans and subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
- 4. Base flood elevation data shall be provided for final development plans and subdivision proposals whenever the base flood elevation has been determined. Without limiting the foregoing, base flood elevation data shall be generated for final development plans and subdivision proposals which include the placement of manufactured home parks or subdivisions of greater than 50 lots or 5 acres, whichever is less. (Ord. 237 §5(part), 1987; Ord. 134 §1(part), 1979; prior code §10-40(1))
- 5. No final development plan or subdivision plat shall be recorded with any residential lot or parcel located totally or partially in a special flood hazard area not modified by a LOMR-F.
- 6. Any final development plan or subdivision plat for non-residential development where any parcel that allows for the construction of any structure shall require the structure to be outside of the special flood hazard area not modified by a LOMR-F prior to the issuance of a building permit.

#### 15.52.110 Flood hazard reduction--Specific standards.

In all areas of special flood hazards where base flood elevation data have been provided as set forth in Section 15.52.090 the following standards are required:

- A. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basements, electrical, heating, ventilation, plumbing, and air conditioning equipment, elevated to at least one foot (1') above base flood elevation.
  - 1. It is required that, within any AO and AH zone on the FIRM, all new construction and substantial improvements of residential structures have the lowest floor, including basement, electrical, heating, ventilation, plumbing, and air conditioning equipment elevated at least one foot (1') above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least three feet (3') if no depth number is specified).

- 2. It is required that, within zones AO and AH, there be adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- 3. The new construction or substantial improvement shall be certified by a registered Colorado Professional Engineer, Architect, or Land Surveyor prior to issuance of a certificate of occupancy.
- B. Nonresidential Construction. New construction and substantial improvement of any commercial, office, industrial or other nonresidential structures shall either have the lowest floor, including basements, electrical, heating, ventilation, plumbing, and air conditioning equipment elevated to at least one foot (1') above base flood elevation or, together with attendant utility and sanitary facilities, shall be floodproofed so that one foot (1') above the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Further:
  - 1. It is required that, within any AO and AH zone on the FIRM, all new construction and substantial improvements of nonresidential structures shall either have the lowest floor, including basement, electrical, heating, ventilation, plumbing, and air conditioning equipment elevated at least one foot (1') above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least three feet (3') if no depth number is specified) or, together with attendant utility and sanitary facilities, shall be designed so that one foot (1') above the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and have structure components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
  - 2. It is required that, within zones AO and AH, there be adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
  - 3. The new construction or substantial improvement shall be certified by a registered Colorado Professional Engineer or Architect for compliance with these regulations prior to issuance of a certificate of occupancy.

#### C. Mobile and Manufactured Homes.

- 1. All mobile and manufactured homes or those to be substantially improved shall be elevated on a permanent concrete foundation such that the lowest floor of the manufactured home is at least one foot (1') above the base flood elevation and is securely anchored to an adequately anchored foundation system.
- 2. Except as provided in this subsection, all dwellings shall be constructed on a permanent concrete foundation which foundation shall have the following minimum characteristics:
  - a. It shall be constructed to be below estimated frost depth.
  - b. The foundation shall be located directly below not less than ninety percent of the outside perimeter of the first floor building wall.
    - c. The foundation shall be at a minimum eight inches in thickness.

- 3. All mobile homes, manufactured homes and other dwelling structures located within the flood plain shall have flood vents and such other flood hazard reduction components as are required by applicable FEMA regulations.
- 4. The new construction or substantial improvement shall be certified by a registered Colorado Professional Engineer, Architect, or Land Surveyor for compliance with these regulations prior to issuance of a certificate of occupancy.
- D. Recreational Vehicles. All recreational vehicles placed on sites within Flood Hazard Zones A1-30, AH, and AE shall either:
  - 1. Be on site for fewer than 180 consecutive days;
  - 2. Be fully licensed and ready for highway use; or
  - 3. Meet the requirements for a mobile or manufactured home listed in Section 15.52.110.C.
- E. Alteration of a Watercourse. Any alteration of an existing watercourse within the special flood hazard area that increases or decreases the base flood elevation by more than three tenths of one foot (0.30') shall be followed with a LOMR to document the change. Any alteration of a watercourse shall comply with all requirements of FEMA and the Colorado Water Conservation Board. In addition:
  - 1. If the invert of a watercourse is to be altered it shall include a low flow channel to convey base flows. To avoid disturbance of existing wetlands, alterations of watercourses should avoid modification of the invert:
  - 2. Alterations to existing watercourses shall be designed such that velocities are non-erosive based on the soil type or shall include soil anchoring materials that will resist erosion;
  - 3. In special flood hazard areas with a FEMA designated base flood elevation, the watercourse alteration shall not increase the floodway depth, whether a floodway has been identified on the FIRM or not. If a floodway analysis is required it shall be performed by a Colorado Registered Professional Engineer;
    - 4. Any alteration of a watercourse shall include provisions for required maintenance; and
  - 5. Any alteration of a watercourse shall be designed by a Colorado Registered Professional Engineer. Construction drawings for the alteration of watercourse shall be sealed by a Colorado Registered Professional Engineer.

#### 15.52.120 Floodways.

Located within areas of special flood hazard established in Section 15.52.090 are areas that may also be designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

A. Prohibit encroachments, including fill, new construction, substantial improvements and other development unless certification by a registered professional engineer or architect is provided

demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

B. If subsection A of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 15.52.100 and 15.52.110.

#### 15.52.125 Critical facilities.

A critical facility is a structure or related infrastructure, but not the land on which it is situated, as specified in Rule 6 of the Rules and Regulations for Regulatory Floodplains in Colorado, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood.

A. Classification of critical facilities. It is the responsibility of the town board to identify and confirm that specific structures meet the following criteria:

Critical facilities are classified under the following categories: (a) Essential Services; (b) Hazardous Materials; (c) At-risk Populations; and (d) Vital to Restoring Normal Services.

- 1. Essential services facilities include public safety, emergency response, emergency medical, designated emergency shelters, communications, public utility plant facilities, and transportation lifelines. These facilities consist of:
  - a. Public safety (police stations, fire and rescue stations, emergency vehicle and equipment storage, and, emergency operation centers);
  - b. Emergency medical (hospitals, ambulance service centers, urgent care centers having emergency treatment functions, and non-ambulatory surgical structures but excluding clinics, doctors' offices, and non-urgent care medical structures that do not provide these functions);
  - c. Designated emergency shelters;
  - d. Communications (main hubs for telephone, broadcasting equipment for cable systems, satellite dish systems, cellular systems, television, radio, and other emergency warning systems, but excluding towers, poles, lines, cables, and conduits);
  - e. Public utility plant facilities for generation and distribution (hubs, treatment plants, substations and pumping stations for water, power and gas, but not including towers, poles, power lines, buried pipelines, transmission lines, distribution lines, and service lines); and
  - f. Air Transportation lifelines (airports (municipal and larger), helicopter pads and structures serving emergency functions, and associated infrastructure (aviation control towers, air traffic control centers, and emergency equipment aircraft hangars).

Specific exemptions to this category include wastewater treatment plants (WWTP), non-potable water treatment and distribution systems, and related appurtenances.

Public utility plant facilities may be exempted if it can be demonstrated to the satisfaction of the town board that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same utility or available through an intergovernmental agreement or other contract) and connected, the alternative facilities are either located outside

of the 100-year floodplain or are compliant with the provisions of this title, and an operations plan is in effect that states how redundant systems will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the town on an asneeded basis upon request.

- 2. Hazardous materials facilities include facilities that produce or store highly volatile, flammable, explosive, toxic and/or water-reactive materials. These facilities may include:
  - a. Chemical and pharmaceutical plants (chemical plant, pharmaceutical manufacturing);
  - b. Laboratories containing highly volatile, flammable, explosive, toxic and/or water-reactive materials;
  - c. Refineries:
  - d. Hazardous waste storage and disposal sites; and
  - e. Above ground gasoline or propane storage or sales centers.

Facilities shall be determined to be critical facilities if they produce or store materials in excess of threshold limits. If the owner of a facility is required by the Occupational Safety and Health Administration (OSHA) to keep a Material Safety Data Sheet (MSDS) on file for any chemicals stored or used in the work place, AND the chemical(s) is stored in quantities equal to or greater than the Threshold Planning Quantity (TPQ) for that chemical, then that facility shall be considered to be a critical facility. The TPQ for these chemicals is: either 500 pounds or the TPO listed (whichever is lower) for the 356 chemicals listed under 40 C.F.R. § 302 (2010), also known as Extremely Hazardous Substances (EHS); or 10,000 pounds for any other chemical. This threshold is consistent with the requirements for reportable chemicals established by the Colorado Department of Health and Environment, OSHA requirements for MSDS can be found in 29 C.F.R. § 1910 (2010). The Environmental Protection Agency (EPA) regulation "Designation, Reportable Quantities, and Notification," 40 C.F.R. § 302 (2010) and OSHA regulation "Occupational Safety and Health Standards," 29 C.F.R. § 1910 (2010) are incorporated herein by reference and include the regulations in existence at the time of the promulgation this ordinance, but exclude later amendments to or editions of the regulations.

Specific exemptions to this category include:

- i. Finished consumer products within retail centers and households containing hazardous materials intended for household use, and agricultural products intended for agricultural use.
- ii. Buildings and other structures containing hazardous materials for which it can be demonstrated to the satisfaction of the local authority having jurisdiction by hazard assessment and certification by a qualified professional (as determined by the town) that a release of the subject hazardous material does not pose a major threat to the public.
- iii. Pharmaceutical sales, use, storage, and distribution centers that do not manufacture pharmaceutical products.

These exemptions shall not apply to buildings or other structures that also function as critical facilities under another category outlined in this section.

- 3. At-risk population facilities include medical care, congregate care, and schools. These facilities consist of:
  - a. Elder care (nursing homes);
  - b. Congregate care serving 12 or more individuals (day care and assisted living); and
  - c. Public and private schools (pre-schools, K-12 schools), before-school and after-school care serving 12 or more children);
- 4. Facilities vital to restoring normal services including government operations. These facilities consist of:
  - a. Essential government operations (public records, courts, jails, building permitting and inspection services, community administration and management, maintenance and equipment centers); and
  - b. Essential structures for public colleges and universities (dormitories, offices, and classrooms only).

These facilities may be exempted if it is demonstrated to the town board that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same entity or available through an intergovernmental agreement or other contract), the alternative facilities are either located outside of the 100-year floodplain or are compliant with this chapter, and an operations plan is in effect that states how redundant facilities will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the town on an as-needed basis upon request.

- B. Protection for critical facilities. New construction or substantial improvement of a Critical Facility shall, when practicable, have continuous non-inundated access during a 100-YR event flood and shall either:
  - 1. Be located outside of the special flood hazard area; or
  - 2. Set the elevation of the lowest floor, including basements, electrical, heating, ventilation, plumbing, and air conditioning equipment, to at least two feet (2') above the base flood elevation.
- C. Ingress and egress for new critical facilities.

New critical facilities shall, when practicable as determined by the town, have continuous non-inundated access (ingress and egress for evacuation and emergency services) during a 100-year flood event.

# 15.52.130 Floodplain Development Permit.

A. A floodplain development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 15.52.090. Application for a floodplain development

permit shall be made in a form acceptable to the town and may include, but not be limited to; improvement plans drawn to scale showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the limits of the regulatory floodplain. All floodplain development permit applications shall be accompanied by an application fee in an amount set by resolution of the town board.

- B. Specifically, the following information is required:
- 1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all new or substantially improved structures;
- 2. Elevation in relation to mean sea level to which any new or substantially improved non-residential structure that has been or will be floodproofed;
- 3. Certification by a registered Colorado professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 15.52.110(B);
- 4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
- C. Applications will be reviewed to determine if the following relevant factors are addressed:
  - 1. The danger to life and property due to flooding or erosion damage;
  - 2. The susceptibility of the proposed improvement or development to flood damage;
- 3. The danger that flooding can cause materials or debris to be swept onto other property to the injury of others:
  - 4. The safety of access to the property in times of flooding by ordinary and emergency vehicles;
  - 5. Undue burden on municipal services during and after flood conditions; and
  - 6. The availability of an alternative location outside of the special flood hazard area.

#### 15.52.140 Local administrator—Designation.

The town clerk is appointed as the local administrator to administer and implement this chapter by granting or denying floodplain development permit applications in accordance with its provisions.

#### 15.52.150 Local administrator—Powers and duties.

Duties of the local administrator shall include, but not be limited to:

- A. Review all floodplain development permits to determine that the permit requirements of this chapter have been satisfied;
- B. Review all floodplain development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required;

- C. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 15.52.120(A) are met;
- D. When base flood elevation data has not been provided in accordance with Section 15.52.090, the local administrator shall obtain, review and reasonably utilize any base elevation and floodway data available from a federal, state or other source, in order to administer Sections 15.52.110;
- E. Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
  - F. For all new substantially improved floodproofed structures:
  - 1. Verify and record the actual elevation (in relation to mean sea level to which the structure has been floodproofed), and
    - 2. Maintain the floodproofing certifications required in Section 15.52.130(B)(3);
  - G. Maintain for public inspection all records pertaining to the provisions of this chapter;
- H. Notify the Colorado Water Conservation Board and adjacent communities prior to any alteration or relocation of a riverine watercourse, and submit evidence of such notification to FEMA;
  - I. Ensure that the flood carrying capacity of an altered or relocated watercourse is maintained;
- J. Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 15.52.160.

# 15.52.160 Variance procedure.

# A. Appeal Board.

- 1. The board of adjustment as established by the town shall hear and decide appeals and requests for variances from the requirements of this chapter.
- 2. The board of adjustment shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the local administrator in the enforcement or administration of this chapter.
- 3. Those aggrieved by the decision of the board of adjustment may appeal such decision to the district court, as provided by Colorado statutes.
- 4. In passing upon such applications, the board of adjustment shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:
  - a. The danger that materials may be swept onto other lands to the injury of others;

- b. The danger of life and property due to flooding or erosion damage;
- c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - d. The importance of the services provided by the proposed facility to the community;
  - e. The necessity to the facility of waterfront location, where applicable;
- f. The availability of alternative locations for the proposed uses which are not subject to flooding or erosion;
  - g. The compatibility of the proposed use with existing and anticipated development;
- h. The relationship of the proposed use to the comprehensive plan and floodplain management program of that area;
  - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
- j. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- 5. Upon consideration of the factors of subdivision 4 of this subsection of this section and the purposes of this chapter, the board of adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- 6. The board of adjustment shall maintain the records of all appeal actions, including technical information and report any variances to FEMA upon request.

#### B. Conditions for Variances.

- 1. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing subparagraphs a through k of subsection A(4) of this section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- 2. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
- 3. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

- 4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  - 5. In addition to the other requirements in this section, variances shall only be granted upon:
    - a. A showing of good and sufficient cause;
  - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
  - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in subsection A(4) of this section, or conflict with existing local laws or ordinances.
- 6. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevations and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

# 15.52.170 Liability--Disclaimer.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the town, any board, commission, officer or employee thereof or the Federal Emergency Management Agency, for any flood damages that result from reliance on this chapter or any administrative or other decision lawfully made thereunder.

#### 15.52.180 Violation--Penalties.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a violation of this code. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction thereof be fined not more than nine hundred ninety-nine dollars or imprisoned for not more than one year, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing contained in this chapter shall prevent the town from taking such other lawful action as is necessary to prevent or remedy any violation.

<u>Section 2.</u> If any section, paragraph, sentence, clause, or phrase of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this ordinance. The Board of Trustees hereby declares that it would have passed this ordinance and each part or parts hereof irrespective of the fact that any one part or parts be declared unconstitutional or invalid.

<u>Section 3.</u> All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portion hereof are hereby repealed to the extent of such inconsistency or conflict.

Section 4. The repeal or modification of any provision of the Municipal Code of the Town of Firestone by this ordinance shall not release, extinguish, alter, modify, or change in whole or in part any penalty, forfeiture, or liability, either civil or criminal, which shall have been incurred under such provision, and each provision shall be treated and held as still remaining in force for the purpose of sustaining any and all proper actions, suits, proceedings, and prosecutions for the enforcement of the penalty, forfeiture, or liability, as well as for the purpose of sustaining any judgment, decree, or order which can or may be rendered, entered, or made in such actions, suits, proceedings, or prosecutions.

INTRODUCED, READ, ADOPTED, APPROVED, AND ORDERED PUBLISHED IN FULL this day of flum bur, 2013.

TOWN OF FIRESTONE, COLORADO

Chad Auer Mayor

ATTEST:

Carissa Medina Town Clerk